

REMARKS

Claims 1 – 7, 10 – 15, and 18 remain in this application. A listing of the current claims is provided herein for the convenience of the Examiner.

Claim 1, as well as claims 2 – 7, and 10 dependent thereon, and claim 11, as well as claims 12 – 15, and 18 dependent thereon, require an all natural, nutritionally fortified ready to eat vegetable yogurt and method of manufacturing same by requiring that no artificial additives or preservatives be added to the ready to eat vegetable yogurt and the vegetables remain unfermented. Claims 1 and 11, as well as claims 2 – 7, 10 and claims 12 – 15, and 18 dependent thereon, respectively, set forth that no preservatives or artificial additives need be added to the ready to eat vegetable yogurt and recite an all natural vegetable yogurt product fortified with 40 – 60 percent by weight of vegetables. In addition, claims 1 and 11, as well as claims 2 – 7, 10 and claims 12 – 15, and 18 dependent thereon, respectively, require that the ready to eat vegetable yogurt be stored at refrigeration temperatures until consumed to prevent the active cultures of the yogurt from fermenting the cold cooked pureed vegetables so that the cold cooked pureed vegetables retain their natural, unfermented, chemical make up.

Claims 1 – 7, 10, 11 – 15 and 18 require that this cold smooth vegetable puree be blended with cold plain yogurt and natural additives. Applicant's current claims require that no artificial additives and no preservatives be added to the ready to eat vegetable yogurt. Applicant has found that adding cold pureed vegetables to cold plain yogurt, and maintaining cold temperatures, prevents the yogurt from fermenting the vegetable and thereby preserves taste and nutritional properties of the vegetables. Applicant's current claims require that the cooked pureed vegetables range from 40 to 60 percent by weight. The weight percent required by

applicant's present claims provides a vegetable yogurt having a significant weight percentage of vegetables without the presentation of preservatives or other non-natural additives, thereby yielding a highly nutritional food packed with essential vitamins, minerals, and fibers inherent in the vegetable utilized.

I. Rejection under 35 U.S.C. §103(a):

The Examiner has maintained the previous obviousness rejection of claims 1 – 7, 10 – 15 and 18 under 35 U.S.C. §103(a) as being unpatentable over the combination of references cited, including: Japanese Patent No. 61231958 to Hara, Japanese Patent No. 55007013 to Kazutada et al., Japanese Patent No. 3112454 to Masahiro et al., and Great Britain Patent No. 2294625 to Oliver.

Hara discloses a food product and process to produce a food excellent in hygienicity, nutrient, safety, taste and low calorific value, by using MISO (fermented bean paste) and/or NYUFU (fermented milk product such as yogurt) as an agent to retard the freeze- denaturation of a food. At least a part of the taste of original unfrozen food is produced by the freezing and thawing of a raw material. In the above process 100 pts. of a food such as cereal, potato, cake, bean, fish, shellfish, meat, egg, vegetable, seasoning, cooked food, algae, etc., of the normal state is mixed with >=3pts. of MISO, NYUFU, desalted MISO, desalted NYUFU or their mixture or a mixture of >=1pt. of said MISO or NYUFU and a seasoning such as sugar, oil and fat, etc.

Kazutada et al. discloses a food product and process to prepare a yogurt containing vegetables having softened fermentation odor and improved flavor, by adding vegetables to the yogurt during the preparation step. Finely cut or ground vegetables, extracts, juices, heated or

cooked vegetables are added to yogurt before or after the fermentation. The vegetables are added to one or both layers of yogurt and jelly prepared by using a gelling agent.

Masahiro et al. discloses a yogurt jelly containing vegetable and process to suppress grassy smell of vegetables and improve the taste and flavor by mixing vegetables, yogurt and a gelling agent. The objective vegetable containing yogurt jelly is produced by mixing vegetables, yogurt and a gelling agent and forming the mixture into a prescribed form. There is no particular restriction on the kind of vegetable and any kind of leaf vegetables, root vegetables, fruit vegetables, stem vegetables or flower vegetables can be used as the vegetable. A conventional plain yogurt on the market can be used as the yogurt. The gelling agent is e.g. carrageenan, agar, gelatin, gellan gum, pectin, xanthan gum or their mixture.

Oliver discloses savory flavoring for yogurts that comprise rosaceous fruit, preferably one or more of apple, pear, plum and/or damson. The savory flavoring additionally comprises one or more vegetables, herbs and/or spices. The application also provides yogurts flavored with such savory flavorings.

In sustaining the previous rejection, the Examiner maintains that Hara, Kazutada et al., Masahiro et al., and Oliver disclose a yogurt comprising vegetables. (Hara, abstract; Kazutada et al., abstract; Masahiro et al., abstract; and Oliver, entire document, especially pages 1 and 3). The Examiner has stated that Applicant's claims differ as to the recitation of specific cultures, percents and a cooling step. As to specific yogurt cultures, the Examiner has stated that it is notoriously well-known in the art and used for their art-recognized purpose. As to the percents of vegetable to yogurt claimed by Applicant, the Examiner has stated that, in the absence of showing to the contrary, the amounts claimed are seen to be no more than a matter of choice,

dictated by preference, well-within the skill of the art. The Examiner further stated that, once the art has recognized the addition of vegetable products to yogurt the use and manipulation of types of vegetables and percents employed is merely a matter of choice and well-within the skill of the art. Thus, the Examiner maintains that it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use conventional yogurt cultures and the claimed percents in that of Hara, Kazutada et al., Masahiro et al, or Oliver because the use of conventional cultures and preferred amounts is well-within the skill of the art.

The Examiner has stated that Applicant's arguments contained in the Response filed November 28, 2007 have been fully considered but not found persuasive (hereinafter, the '11/07 Response). Claims 1 – 7, 10 – 15 and 18 were amended in the November 28, 2007 Response to require that no artificial additives and no preservatives be added to the ready to eat vegetable yogurt. Further, in the November 28, 2007 Response applicant argued that any combination of the references would not teach, suggest or otherwise achieve applicant's claimed invention. Applicant argued that there is no motivation to combine the references, as the art does *not specifically teach* that a large weight percent of vegetable products can be mixed with yogurt to yield a stable food product.

In response to these arguments the Examiner has stated that, in the absence of unexpected results, the use and manipulation of vegetables and percents is well-within the skill of the art and merely a matter of choice. Further, the Examiner has stated that the prior art clearly teaches the addition of vegetables to yogurt *as is claimed*, and that in the absence of showing to the contrary, applicant is using known components to obtain no more than expected results. (emphasis added by applicant). The Examiner further notes that once the vegetables are removed from heat, the

cooling process is inherent; and the immediate cooling of products to prevent overcooking is conventional. Additionally, the Examiner further notes that both additives and preservatives are optional ingredients.

Applicant's current claims are patentable over Hara, Kazutada et al., Masahiro et al., and/or Oliver because none of the references, alone or in combination, teach or suggest all the claim limitations of applicant's claimed invention.

Further, Applicant's current claims are patentable over Hara, Kazutada et al., Masahiro et al., and/or Oliver because there is no teaching, suggestion or motivation to modify the references applied to omit preservatives, as is required by applicant's claims, because the references teach away from a vegetable yogurt having large weight percent of vegetables with no preservative or artificial flavorings added, as is required by applicant's claims.

In determining obviousness "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight ... (*Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984). MPEP 2143.03.

Applicant's invention as currently claimed requires a ready to eat vegetable yogurt and process, comprising (i) cooked and pureed vegetables that are rapidly cooled before pureeing to yield a cold uniform consistency, (ii) cold plain yogurt comprising active cultures of *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactobacillus reuteri* and *Bifidobacterium bifidum*, (iii) natural additives to enhance flavor and taste, (iv) the cold cooked pureed vegetables, the cold plain yogurt with active cultures and the natural additives blended to form a

cold homogeneous, uniform mixture of ready to eat vegetable yogurt, wherein the cold cooked pureed vegetables range from 40 to 60 percent by weight, and wherein no artificial additives or preservatives are added to the ready to eat vegetable yogurt; and (v) the ready to eat vegetable yogurt stored at refrigeration temperatures until consumed to prevent the active cultures of the yogurt from fermenting the cold cooked pureed vegetables so that the cold cooked pureed vegetables retain their natural, unfermented, chemical makeup. Further, applicant's claims require that the cold cooked pureed vegetables remain unfermented when the vegetable yogurt is stored at refrigeration temperatures.

None of Hara, Kazutada et al., Masahiro et al. or Oliver disclose the following elements required by applicant's claims: a) using cooked vegetables; b) pureeing cold vegetables to yield a cold puree; c) the cold cooked pureed vegetables ranging from 40 to 60 percent by weight; d) no artificial additives or preservatives; and e) vegetables remaining unfermented.

Hara discloses using MISO (fermented bean paste) and/or NYUFU (fermented milk product such as yogurt) as an agent to retard the freeze- denaturation of a food, wherein at least a part of the taste of original unfrozen food is produced by the freezing and thawing of a raw material. Hara teaches using 100 pts. of a food such as cereal, potato, cake, bean, fish, shellfish, meat, egg, vegetableof the normal state being mixed with ≥ 3 pts. of MISO, NYUFU, desalted MISO, desalted NYUFU or their mixture or a mixture of ≥ 1 pt. of said MISO or NYUFU and a seasoning such as sugar, oil and fat, etc. The vegetables used in Hara are of the "normal state" and therefore would be raw or uncooked vegetables. There is no suggestion or teaching in Hara that the vegetables are pureed. Therefore, Hara does not only fail to disclose using cooked, cooled pureed vegetables as is required by applicant's claims, but tends to teach

away from using same. Hara is merely a process for freezing vegetables, and cannot even be viewed as a vegetable yogurt product, as the amount of NYUFU is minimal, ≥ 3 pts., as compared to the vegetable, 100pts. Therefore, Hara does not teach or suggest all the claim limitations of applicant's claims.

Kazutada et al. discloses a food product and process to prepare a yogurt containing vegetables having softened fermentation odor and improved flavor, by adding vegetables to the yogurt during the preparation step. Kazutada et al. teaches finely cut or ground vegetables, extracts, juices, heated or cooked vegetables are added to yogurt before or after the fermentation. Kazutada et al. further teaches that the vegetables are added to one or both layers of yogurt and jelly prepared by using a gelatinizing agent. Applicant's claim limitations require that cold cooked pureed vegetables are added to cold plain yogurt to form a cold homogeneous, uniform mixture of ready to eat vegetable yogurt, wherein no artificial additives or preservatives are added and the ready to eat vegetable yogurt is stored at refrigeration temperatures until consumed to prevent said active cultures of said yogurt from fermenting said cold cooked pureed vegetables so that said cold cooked pureed vegetables retain their natural, unfermented, chemical makeup. Meanwhile, Kazutada et al. not only fails to teach a homogeneous uniform mixture ("vegetables are added to one or both layers of yogurt and jelly", Kazutada et al., abstract), but fails to teach that the vegetables remain unfermented. In fact, Kazutada et al. teaches away from the vegetables being unfermented by expressly teaching "*a yogurt containing vegetables having softened fermentation odor and improved flavor, by adding vegetable to the yogurt during the preparation step.*" Moreover, nowhere in Kazutada et al. is there a disclosure or suggestion or teaching that the vegetables are pureed to form a cold

vegetable puree that is added to the yogurt. Indeed such a teaching of adding cold pureed vegetables would inherently conflict with the teachings of Kazutada et al. because Kazutada et al. intends for the vegetables to become fermented. **Therefore, Kazutada et al. does not teach or suggest all the claim limitations of applicant's claims.**

Masahiro et al. discloses a yogurt jelly containing vegetable and process to suppress grassy smell of vegetables and improve the taste and flavor by mixing vegetables, yogurt and a gelling agent. Nowhere in Masahiro et al. is there a disclosure, suggestion or teaching that the vegetables are pureed to form a cold vegetable puree that is added to the yogurt. Nor is there a teaching that no preservatives or artificial additives are added to the yogurt, instead Masahiro et al. teaches using a gelling agent. **Therefore, Masahiro et al. does not teach or suggest all the claim limitations of applicant's claims.**

Lastly, Oliver discloses savory flavoring for yogurts comprise rosaceous fruit, preferably one or more of apple, pear, plum and/or damson. The savory flavoring additionally comprises one or more vegetables, herbs and/or spices. The application also provides yogurts flavored with such savory flavorings. Oliver discloses a vegetable type yogurt wherein rosaceous fruit, 9 to 31 weight percent, is added as a stabilizing agent acting as a preservative for the yogurt food product. The addition of the rosaceous fruit in Oliver for preserving the yogurt food product conflicts with applicant's limitation that no preservatives be added to the yogurt. **Therefore, Oliver does not teach or suggest all the claim limitations of applicant's claims.**

Further, the Examiner has noted that *"both additives and preservatives are optional ingredients"* of applicant's vegetable yogurt food product. Applicant respectfully disagrees with the Examiner and points to the limitation in previously presented independent claims 1 and 11

requiring that “... no artificial additives or preservatives are added to said ready to eat vegetable yogurt”. Although the ready to eat vegetable yogurt recited by applicant’s claims require the addition of “natural additives”, same is specifically set forth to “enhance flavor and taste”. Thus, according to applicant’s current claims, additives may be added if they are natural and for enhancing taste. Preservatives are not optional ingredients, and are expressly prohibited via the language of applicant’s claims.

The ready to eat vegetable yogurt required by applicant’s current claims comprises cooked pureed vegetables that are rapidly cooled and pureed to form a cold smooth vegetable puree. The claims require that this cold smooth vegetable puree is blended with cold plain yogurt and natural additives and further require that no artificial additives and no preservatives be added to the ready to eat vegetable yogurt. Applicant has found that adding cold pureed vegetables to cold plain yogurt, and maintaining cold temperatures, prevents the yogurt from fermenting the vegetable and thereby preserves taste and nutritional properties of the vegetables. Applicant’s current claims require that the cooked pureed vegetables range from 40 to 60 percent by weight. The weight percent required by applicant’s present claims provides a vegetable yogurt having a significant weight percentage of vegetables without the presentation of preservatives or other non-natural additives, thereby yielding a highly nutritional food packed with essential vitamins, minerals, and fibers inherent in the vegetable utilized.

The Examiner has stated that applicant’s claim differ as to the recitation of specific cultures, percents and a cooling step. As to the percents of vegetable to yogurt claimed by Applicant, the Examiner has stated that, in the absence of showing to the contrary, the amounts claimed are seen to be no more than a matter of choice, dictated by preference, and well-within

the skill of the art. However, Applicant respectfully submits that the amounts are not merely a matter of choice, but have been found to provide a product where the vegetables remain stable and unfermented when blended in cold conditions with cold yogurt, while the art teaches to the contrary. Namely, the art applied teaches that the addition of vegetables to yogurt requires preservatives and additives in order to stabilize the vegetables and prevent fermentation and degradation.

Accordingly, reconsideration of the rejection of claims 1 – 7, 10 – 15 and 18 under 35 USC §103(a) as being unpatentable over Hara, Kazutada et al., Masahiro et al., and/or Oliver is respectfully requested.

Alternatively, Applicant's claims omit the use of a stabilizing agent while at the same time retaining the omitted element's (stabilizing agent's) function, thus yielding the omission of an element with retention of the element's function, indicating indicia of unobviousness under MPEP 2144.04 II B.

Under MPEP 2144.04 II B, the omission of an element and retention of its function is indicia of unobviousness. In re Edge, 359 F.2d 896, 149 USPQ 556 (CCPA 1966). In Edge an applicant's claims were directed to a printed sheet having a thin layer of erasable metal bonded directly to a sheet wherein the thin layer obscured the original print until removal by erasing. The prior art in Edge disclosed a similar printed sheet further comprising an intermediate transparent and erasure-proof protecting layer which prevented erasure of the printing when the top layer was erased. The Court in Edge held that although the transparent layer taught by the

prior art was eliminated, the function of the transparent layer was retained by the applicant, and therefore the applicant's claims were found unobvious. As in Edge, Applicant's claims 1 – 18 provide a vegetable yogurt that omits an element of the prior art references, while at the same time retaining the element's function.

Each reference applied by the Examiner teaches the addition of an agent to a food product having vegetables and yogurt in order to provide the function of stability to the food product. The art as a whole, like these references, teaches that vegetables are unstable in yogurt, and as such, small weight percents of vegetables are taught to be used and stabilization means are taught to be needed – otherwise the vegetables will become rancid in taste and lose nutritional value. Therefore, any combination of the references applied and the art as a whole would render producing a food product having a lesser weight percent of vegetable and stabilization additives. Applicant has found that where the vegetables are pureed to form a cold puree that is added to cold yogurt, a large weight percent of vegetables to yogurt can be utilized without fermentation or breakdown of the vegetable. Applicant's claims omit the use of a stabilizing agent while at the same time retaining the omitted element's (stabilizing agent's) function. (MPEP 2144.04 II B, “*Omission of an Element with Retention of the Element's Function Is an Indicia of Unobviousness*”). As such, indicia of unobviousness have been shown by the applicant.

Hara discloses the addition of fermented bean past (MISO) and / or fermented milk product, such as yogurt (NYUFU), to a food product (such as vegetable), in a ratio of ~3pts. MISO / NYUFU to 100pts. food product so that the MISO/NYUFU acts as an agent to retard the freeze-denaturation of the food product. Kazutada et al. discloses a process wherein finely cut or

ground vegetables, extracts, juices, *heated or cooked vegetables* are added to yogurt *before* fermentation and a gelatinizing agent is added, wherein the addition before fermentation and the gelatinizing agent are added in order to provide stabilization to the vegetables via soften fermentation odor and improved flavor. Masahiro et al. discloses a process for formulating a vegetable food product comprising the mixing of vegetables, yogurt and a gelling agent appointed to suppress the grassy smell of vegetables and improve the taste and flavor. Lastly, Oliver discloses a vegetable type yogurt wherein rosaceous fruit, 9 to 31 weight percent, is added as a stabilizing agent acting as a preservative for the yogurt food product.

The addition of a sizeable weight percentage of pureed vegetables, as called for by applicant's present claims 1 – 18, is carried out under cold conditions as the cooked vegetable are rapidly cooled when at least one frozen vegetable is added thereto and mixed to form a cold pureed vegetable that is blended with yogurt so that degradation of the vegetable's nutrients is minimized. The addition of cold pureed vegetables to a yogurt is not taught or suggested by the prior art workers, including Hara, Kazutada et al., Masahiro et al., or Oliver. Nor is the combination of combining cooked vegetables and at least one frozen vegetable taught or suggested by the prior art workers, including Hara, Kazutada et al., Masahiro et al., or Oliver. Moreover, the addition of cold pureed vegetables in amounts ranging between 40 to 60 weight percent is not disclosed or suggested by any prior art worker, including Hara, Kazutada et al., Masahiro et al., or Oliver.

Rather, the prior art teachings, including Hara, Kazutada et al., Masahiro et al., or Oliver suggest that preservatives and the like (rosaceous fruit; jellies; etc.) must be added to vegetable yogurt preparations in order to stabilize the flavoring. None of the prior art references, including

Hara, Kazutada et al., Masahiro et al., or Oliver teach a ready to eat vegetable yogurt that utilizes 40 to 60 weight percent of cold vegetables without the addition of preservatives and the like. Clearly, such a sizeable addition of cold pureed vegetable is a not merely a matter of choice. For the amount of vegetable required by Applicant's claims 1-18 and the requirement that the vegetables be added in a cold pureed state constitute elements that function to yield a highly nutritional food product that is nutritionally stable and viable without the need for the addition of stabilizing agents.


Applicant has carried out a consumer survey demonstrating impending commercial success of applicant's food product and demonstrates a long felt need. The survey questioned consumers as to the taste, texture, overall appeal, and likelihood of purchasing the product. A scale of 1 – 5 was utilized, with 5 being the highest score indicating a positive score. Four flavors were available for testing: carrot, broccoli, butternut squash and sweet potato. Sixty-two recorded samples of the vegetable yogurt of applicant's present claims were given out, with about forty non-recorded samples. Taste, texture, overall appeal and likelihood to purchase all scored high, averaging approximately 4+ on the scale from 0 to 5. Average score for likelihood to purchase the food product was 4.09 out of 5. It is respectfully submitted that applicant's survey, which demonstrates the strong prospect that applicant's food product will be commercially successful, provides further evidence supporting patentability of the invention called for by applicant's claims.

Accordingly, reconsideration of the rejection of claims 1 – 7, 10 – 15 and 18 under 35 USC §103(a) as being unpatentable over Hara, Kazutada et al., Masahiro et al., and/or Oliver is respectfully requested.

CONCLUSION

In view of the amendments to the claims and the remarks set forth above, it is respectfully submitted that the present application is in allowable condition. Reconsideration of the rejection and allowance of claims 1 – 7, 10 – 15 and 18, as amended, are earnestly solicited.

Respectfully submitted,
Marina Shereshevsky

By 
Ernest D. Buff
(Her Attorney)
Reg. No. 25,833
(908) 901-0220

0162-1-A7-r1